

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently Amended) A method for transferring an information object across a network, ~~wherein a plurality of processors and storage devices are coupled to the network,~~ wherein the information object resides on a first storage device accessed by a provider process executing on a first processor, wherein the information object comprises a plurality of attributes, wherein each attribute contains information, ~~is identified by a name that also identifies the first storage device,~~ wherein a consumer process executes on a second processor accessing a second storage device, the method comprising: ~~the steps of~~

~~using the consumer process to generate a request for the information object by using its name;~~

~~transferring the request over the network to the provider process;~~

~~sending~~ transferring the information object across the network to the consumer process;

storing the information object in the second storage device as a second instance of the information object;

~~subsequent to the step of transferring the information object, performing the following steps:~~

using the provider process to modify one or more of the attributes of the information object, an amount of information contained by the one or more modified attributes being less than an amount of information contained by the information object;

~~using the network to transfer information about the modification;~~

~~sending the one or more modified attributes of the information object across the~~
~~network to the consumer process; and~~

~~synchronizing the second instance of the information object based on by using~~
~~the transferred information about the modification the one or more modified attributes.~~

2. (Original) The method of claim 1, wherein the information object is a data object.
3. (Original) The method of claim 1, wherein the information object is a data definition.
4. (Original) The method of claim 1, wherein the information object is an algorithm.
5. (Currently Amended) The method of claim 1, ~~wherein the information object has one or more properties~~, further comprising: ~~the steps of~~

using the consumer process to formulate a relational criterion based on the
~~attributes~~ properties of the information object;

using the consumer process to submit a request to the provider process by
performing: ~~the substeps of~~

providing the location of the consumer process within the network₁ ;

providing the unique identifier associated with the information object₁ ;

and

providing the relational criterion to the provider process;

using the provider process to detect when a change in the ~~attributes~~ properties

of the ~~data~~ information object satisfies the relational criterion; ~~and {how is monitoring carried out? Does provider poll?}; and~~

in response to ~~changes~~ the change in the attributes ~~properties~~ of the information object, transferring information about the changed attributes ~~properties~~ across the network and updating the second instance on the second storage device in accordance with the information about the changed attributes. ~~properties~~.

6. (Original) The method of claim 1, wherein the information object is stored in a storage device local to the processor executing the provider process.

7. (Currently Amended) The method of claim 1, further comprising: ~~the step of~~
using the provider process to create the information object.

8. (Currently Amended) The method of claim 1, wherein a server process is used to control modifications to the information object, the method further comprising: ~~the steps of~~
receiving modification requests at the server process in the form of
add/update/delete instructions;
using the server process to modify the information object in accordance with the received requests; and
using the server process to transmit information on modifications to the information object.

9. (Currently Amended) The method of claim 1, wherein a server process is used to

control requests of the consumer process, the method further comprising: ~~the steps of~~

receiving consumer requests at the server process in the form of
publish/subscribe/edit operations;

in response to a publish operation request, using the server process to create a
new instance of the information object;

in response, to a subscribe operation request, using the server process to cause
information on modifications to the information object to update the second instance of
the information object on the second storage device; and

in response to edit operations, using the server process to modify the
information object. {How is “edit” different from add/update/delete? non-attribute
editing?}

10. (Currently Amended) The method of claim 9, wherein robot processes execute on one
or more processors, the method further comprising: ~~the step of~~

executing a robot process in response to a publish operation to perform a
function on an instance of the information object.

11. (Currently Amended) The method of claim 1, wherein multiple instances of the
information object exist in multiple storage devices, the method further comprising: ~~the step of~~

using a server process to prevent one or more of the multiple instances from
being ~~updated~~ synchronized.

12. (Currently Amended) The method of claim 1, wherein:

~~the properties include name/value pairs and wherein the step of “using the consumer process to formulate a relational criterion...” includes the substep of~~
each attribute comprises one or more name/value pairs, each name/value pair comprises a name and a value, the method further comprising:

formulating a relational criterion based on one or more names of the name/value pairs.

13. (Currently Amended) The method of claim 1, wherein:

~~the properties include name/value pairs, wherein the step of “using the consumer process to formulate a relational criterion...” includes the substep of~~
each attribute comprises one or more name/value pairs, each name/value pair comprises a name and a value, the method further comprising:

formulating a relational criterion based on one or more values of the name/value pairs.

14. (Currently Amended) The method of claim 1, wherein:

~~the network is a client-server arrangement; and the step of~~
~~using the network to transfer information about the modification~~
sending the one or more modified attributes of the information object across the network to the consumer process comprises: ~~includes the substep of~~

transferring the information in a series of multiple store-and-forward operations.

15. (Original) The method of claim 14, wherein the network is the Internet using Internet Protocol for information transmissions.

16. (Original) The method of claim 15, wherein identification of information objects uses an identifier that includes a Uniform Resource Locator as standardized on the Internet.

17. (Original) The method of claim 1, wherein:

the information object is associated with a data definition defining the class of the information object; and

each instance of the information object is an instance of the defined class.

18-19. (Canceled)

20. (Currently Amended) A method for synchronizing a data definition of an information object across a network, wherein a plurality of processors and storage devices are coupled to the network, wherein the data definition resides on a first storage device accessed by a provider process executing on a first processor, wherein the data definition has one or more attributes, wherein a data object associated with the data definition resides in a second storage device accessed by a consumer process executing on a second processor, the method comprising: ~~the~~ steps of

using the provider process to change at least one attribute of the data definition;

propagating at least one of the changed attributes of the data definition across

the network; and

using the consumer process to access the information data-object according to at least one of the changed attributes of the data definition.

21. (Currently Amended) The method of claim 20, further comprising:

assigning a unique identifier to the data definition by changing at least one of the attributes of the data definition to associate the data definition with a storage place on the first storage device; and

~~wherein the step of "propagating the changed data definition" includes the substep of propagating at least one of the changed attributes of the data definition across the network by propagating the unique identifier.~~

22. (Currently Amended) The method of claim 20, wherein multiple additional consumer processes executing on multiple processors each access and store the data definition, the method further comprising: ~~the steps of~~

using the consumer process to modify at least one of the changed attributes of the data definition to create a second changed data definition;

transferring the second changed data definition to the provider process; and

using the provider process to propagate the second changed data definition to the additional consumer processes.

23-30. (Canceled)

31. (Currently Amended) A system for distributing information objects over the internet,

each information object having a plurality of attributes, the system ~~using~~ comprising a first computer coupled to the Internet, wherein the first computer includes a user input device and a processor, ~~wherein the Internet includes an information object having attributes~~, the system comprising:

means for accepting signals from the user input device to specify a relational condition using one or more of the attributes;

means for using the processor to transfer an indication to the Internet of the specified relational condition;

means for ~~using the processor to receive~~ identifying one or more information objects satisfying the relational condition; and

means for transferring at least a portion of each identified information objects from the Internet to the first computer; and

means for using the processor to receive at least a portion of each identified information object.

32. (Currently Amended) The system of claim 31, wherein one or more attributes of ~~the~~ each information objects includes associated values, wherein the Internet includes a server computer for receiving queries in the form of specified relational conditions and for comparing query conditions with information object attributes to identify information objects that match the query conditions, the system further comprising:

means for using the server computer to receive the specified relational condition;

wherein said means for identifying comprises means for using the server

computer to detect when at least one of the information object's attributes and values satisfy the specified relational condition; and

wherein said means for transferring comprises means for transferring information to the processor to identify the detected information objects.